

Vestigia Iuvenici Iuvenius Database



Digital engineering manual

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Vestigia Iuvenici Iuvenius, Database Digitaly, engineering manual
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Introduction

Stefan Freund and Philip Buckl, University of Wuppertal, have imagined the *Vestigia Iuvenici* database with the aim of highlighting the intertextualities present in the *Historia evangelica* by Aquilinus Juvencus (see [project presentation manual](#)). Bruno Bureau and Inès Burri, University Jean Moulin Lyon 3, are collaborating on the digital execution of this project, which is based on two essential components:

1. The creation of a database of all intertextualities and their analysis, following a specific model established by M. Buckl, to enable filtering of results according to author, themes, etc.
2. Reading the Juvencus text, with the possibility of clicking on words containing one or more intertextualities and accessing their analysis, in a format similar to the database mentioned above.

The first step in creating the database was to encode the texts in XML-TEI¹. To this end, we retrieved pre-existing encoded files from either the [Corpus Corporum](#) or [Musisque Deoque](#) sites, which we modified by segmenting the texts word by word. Indeed, because the project is interested in the intertextuality of word-by-word passages, it is necessary to encode an XML file for each text, with tokenization and word-by-word numbering (fig. 1 below).

```
<text>
  <body>
    <div1 type="Praefatio" n="1">
      <p>
        <l n="0001">
          <w n="00001">Mattheus</w>
          <w n="00002">instituit</w>
          <w n="00003">uirtutum</w>
          <w n="00004">tramite</w>
          <w n="00005">mores</w>
        </l>
        <l n="0002">
          <w n="00006">Et</w>
          <w n="00007">bene</w>
          <w n="00008">uiuendi</w>
          <w n="00009">iusto</w>
          <w n="00010">dedit</w>
          <w n="00011">ordine</w>
          <w n="00012">leges</w>
        <pc>.</pc>
      </l>
      <l n="0003">
          <w n="00013">Marcus</w>
          <w n="00014">amat</w>
      </l>
    </p>
  </div1>
</body>
</text>
```

Figure 1 XML-TEI encoding extract of *Juvenus.xml* file

It is thanks to this textual base that we were able to design a database on the Heurist digital platform and the scholarly digital edition in HTML.

I. The Heurist database

The *Vestigia Iuvenici* database was designed on Heurist² and built around Juvencus' intertextual words.

¹ For more information on XML-TEI, see the encoding manual available on the *Poëxégèse* website (<http://poexegese-girpam.u-strasbg.fr/manuels.xhtml>), another ANR-POBLAM project.

² Heurist is a database software platform developed by the University of Sydney and supported and hosted in France by Huma-Num (<https://documentation.huma-num.fr/heurist/>). We call our database "PoBLAM_vestigia_iuvenici".



Common Entities	Count
Word	150395
Line	25808
Intertextuality	254
Liber	137
Work	119
Secondary epic motiv	107
Secondary biblical motiv	101
Epic Motiv	72
Author	24
Biblical Motiv	20
CMS Menu-Page	11

Figure 2 General information from the Heurist Vestigia Iuvenci database (November 2, 2023)

On Heurist, each database class corresponds to a record type. For Vestigia Iuvenci, we had to create ten of them, detailed below (fig. 2 above: the list of “Common entities”, apart from “CMS Menu-Page”).

1. Record types

a. Textual data

First, all the text data have been imported, structured in five hierarchical levels starting with the word segment:

1. a word [Word]³, contained in...
2. a verse [Line], included in...
3. a book [Liber], included in...
4. a work [Work], written by...
5. an author

All this information was filled in by importing the CSV⁴ file (fig. 3 below) created via XSLT from the XML files of the tokenized, word-numbered texts (fig. 1 above). We added an author abbreviation to each word number, to avoid repetition and create unique identifiers⁵.

³ Square brackets are used in this manual to refer to the names of heurist record types.

⁴ We have chosen the comma as delimiter.

⁵ For example, the word 00001 in Juvencus has the identifier "Iuv00001".

1	Author,Work,Books,Number of line,Text line,Number of the word,Text of the word
2	Aquilinus Juvencus, Historia evangelica, Praef 1,0001, Mattheus instituit uirtutum tramite mores, Iuv00001, Mattheus
3	Aquilinus Juvencus, Historia evangelica, Praef 1,0001, Mattheus instituit uirtutum tramite mores, Iuv00002, instituit
4	Aquilinus Juvencus, Historia evangelica, Praef 1,0001, Mattheus instituit uirtutum tramite mores, Iuv00003, uirtutum
5	Aquilinus Juvencus, Historia evangelica, Praef 1,0001, Mattheus instituit uirtutum tramite mores, Iuv00004, tramite
6	Aquilinus Juvencus, Historia evangelica, Praef 1,0001, Mattheus instituit uirtutum tramite mores, Iuv00005, mores
7	Aquilinus Juvencus, Historia evangelica, Praef 1,0002, Et bene uiuendi iusto dedit ordine leges, Iuv00006, Et
8	Aquilinus Juvencus, Historia evangelica, Praef 1,0002, Et bene uiuendi iusto dedit ordine leges, Iuv00007, bene
9	Aquilinus Juvencus, Historia evangelica, Praef 1,0002, Et bene uiuendi iusto dedit ordine leges, Iuv00008, uiuendi
10	Aquilinus Juvencus, Historia evangelica, Praef 1,0002, Et bene uiuendi iusto dedit ordine leges, Iuv00009, iusto
11	Aquilinus Juvencus, Historia evangelica, Praef 1,0002, Et bene uiuendi iusto dedit ordine leges, Iuv00010, dedit
12	Aquilinus Juvencus, Historia evangelica, Praef 1,0002, Et bene uiuendi iusto dedit ordine leges, Iuv00011, ordine
13	Aquilinus Juvencus, Historia evangelica, Praef 1,0002, Et bene uiuendi iusto dedit ordine leges, Iuv00012, leges
14	Aquilinus Juvencus, Historia evangelica, Praef 1,0003, Marcus amat terras inter caelumque uolare, Iuv00013, Marcus
15	Aquilinus Juvencus, Historia evangelica, Praef 1,0003, Marcus amat terras inter caelumque uolare, Iuv00014, amat
16	Aquilinus Juvencus, Historia evangelica, Praef 1,0003, Marcus amat terras inter caelumque uolare, Iuv00015, terras
17	Aquilinus Juvencus, Historia evangelica, Praef 1,0003, Marcus amat terras inter caelumque uolare, Iuv00016, inter
18	Aquilinus Juvencus, Historia evangelica, Praef 1,0003, Marcus amat terras inter caelumque uolare, Iuv00017, caelumque
19	Aquilinus Juvencus, Historia evangelica, Praef 1,0003, Marcus amat terras inter caelumque uolare, Iuv00018, uolare
20	Aquilinus Juvencus, Historia evangelica, Praef 1,0004, Et uehemens aquila stricto secat omnia lapsu, Iuv00019, Et
21	Aquilinus Juvencus, Historia evangelica, Praef 1,0004, Et uehemens aquila stricto secat omnia lapsu, Iuv00020, uehemens
22	Aquilinus Juvencus, Historia evangelica, Praef 1,0004, Et uehemens aquila stricto secat omnia lapsu, Iuv00021, aquila

Figure 3 Juvencus.csv file extract opened on Oxygen (in red the word identifier)

The [Word], [Line] and [Liber] forms (fig. 4 below) respectively fill in all the essential information: the word and its number, the verse and its number, the book title. Each level is linked to its parent by selecting the data entered in the forms: the word is linked to the verse number, which is itself linked to a book, etc.

The screenshot shows the Oxygen software interface for creating a 'Word' record. The window title is 'Word'. At the top right, there are buttons for 'Fullscreen', 'Standard', and a close button. Below the title bar, there are icons for 'Word', a 'Modify structure' button, and checkboxes for 'Show help' and 'Optional fields'. There are also buttons for 'Template' and 'Bug report'. The main area contains a red label 'contenu dans un vers' and a 'select : Line' dropdown menu. Below this, there are two input fields: 'Word's number' (with a tooltip 'The number of the current word') and 'Word' (with a tooltip 'The word'). At the bottom, there is a dark blue bar with buttons for 'Save then', 'Dupe', 'New', 'Save', 'Save + Close', 'Close', and 'Drop Changes'. On the right side, there is a vertical sidebar labeled 'Record Summary'.

Figure 4 As example Heurist record type "Word" (November 8, 2023)

The [Author] and [Work] forms were also used to record others ancient authors and works.

The [Author] form (fig. 5 below) allows you to enter the author's name, century and category, "Christian poet" and "Classical poet". The latter comes from the vocabulary defined in "Vestigia Iuveni Vocabularies" / "Author categories", making it easy to add new ones.

The screenshot shows the 'Author' record form in Heurist. At the top, there are tabs for 'Fullscreen' and 'Standard', and a close button. Below this is a header with a person icon and the word 'Author', followed by a 'Modify structure' button and two checked options: 'Show help' and 'Optional fields'. There are also buttons for 'Template' and 'Bug report'. The main form area contains three fields: 'Name' (with a text input and a description: 'Usual latin name of the author. e.g.: Vergilius'), 'Century' (with a text input and a description: 'Century of the author. e.g.: 4CE'), and 'Author category' (with a dropdown menu and a description: 'Author category'). At the bottom, there are buttons for 'Save then', 'Dupe', 'New', 'Save', 'Save + Close', 'Close', and 'Drop Changes'. A vertical sidebar on the right is labeled 'Record Summary'.

Figure 5 Heurist record type "Author" (November 8, 2023)

The [Work] form (fig. 6 below) is used to enter the title of the work. Then, if it's not a biblical text, to select the author's name (from the data entered in [Author]), and otherwise to check "Biblical book", to specify whether it's from the Old or New Testament, and its abbreviation.

The screenshot shows the 'Work' record form in Heurist. At the top, there are tabs for 'Fullscreen' and 'Standard', and a close button. Below this is a header with a book icon and the word 'Work', followed by a 'Modify structure' button and two checked options: 'Show help' and 'Optional fields'. There are also buttons for 'Template' and 'Bug report'. The main form area contains several sections: 'Title' (with a text input and a description: 'Latin title'), 'AUTHORED BOOKS' (with a dropdown menu labeled 'appartient à un auteur' and a description: 'Do not fill in if it's a biblical book'), 'BIBLICAL BOOKS' (with radio buttons for 'Biblical book', 'New Testament', and 'Old Testament', and a description: 'Choose what Testament is'), and 'Abbreviation' (with a text input and a description: 'Abbreviation (only for biblical books)'). At the bottom, there are buttons for 'Save then', 'Dupe', 'New', 'Save', 'Save + Close', 'Close', and 'Drop Changes'. A vertical sidebar on the right is labeled 'Record Summary'.

Figure 6 Heurist record type "Work" (November 8, 2023)

b. Motivs

To group the data by theme, the Wuppertal scientific team decided to create two thematic categories and two sub-categories:

- General biblical motif [Biblical motif]
- Secondary biblical theme, dependent on a general biblical theme [Secondary biblical motif]
- General epic theme [Epic motif]

- Secondary epic theme, dependent on a general epic theme [Secondary epic motif]

c. Intertextualities

Finally, we designed the database's most important form for intertextual information [Intertextuality] in four components:

- The “Source” tab contains all information about the Juvenecus’ passage. The relevant word and verse are selected directly from the [Word] and [Line] forms. If it contains a “paraphrased biblical passage”, a “model from pagan poetry” or an “other evidence” the author is selected from the list of authors [Author] and only the additional information are added: the reference and the text passage.

Figure 7 Screenshot of Heurist “Intertextuality”/“Source” form (November 2, 2023)

- The “Follow up text” tab deals with the text which contains a quotation of Juvenecus’ text or allusion to it. As with the source, the form (fig. 9 below) is linked to the relevant word and verse of the author being compared. The metrical form is selected from the predefined vocabulary list (fig. 8 below). As with author categories, using Heurist vocabulary makes it easy to add new generic data. If the author has a paraphrased Bible passage, as above, simply select the author from the [Author] form and enter the additional information.

Figure 8 List of Vestigia Iuveneci Vocabularies / Metrical form (November 2, 2023)

- The last tab is dedicated to metadata (fig.11): the oldest graspable marked source, bibliography and the initials of the file's author.

Figure 11 Screenshot of Heurist “Intertextuality”/“Meta-information” form (November 2, 2023)

Since 4 December 2023, we have added a status to intertextualities to manage their publication on the site. There are three statuses:

- “In progress”: for forms currently being processed
- “Pending”: for forms awaiting validation for publication
- “Approved”: for forms that have been validated and published

2. Data visualization

Once these forms had been filled in, we were able to set up a site (fig. 12 below) to make the results available to everyone. We created a page searching for intertextual entities using filters (on the left of the page). Depending on the filter selections, the results are displayed in the two panels on the right: the first groups all the items obtained and the second displays the technical data sheets for the selected entity.

Figure 12 Screenshot from the Heurist Vestigia Iuveni database site (November 2, 2023)

We created a search filter facet on the entities of the [Intertextuality] form. This allowed us to choose the elements we wished to add to the facet filter, based on the questions in the form: authors or works whose passages echo the texts, the choice of themes, the number of intertextual elements, etc. Because

most of Heurist's tools have been designed to operate on a three-level hierarchy, it is not possible to go all the way back to the author to select the follow up part. However, because we have integrated the choice of verse in addition to the choice of words in the form, we were able to go right up to the name of the work. We also added a search bar to simplify searches.

For the first results panel, we requested in the facet filter to rank the results by the number of common elements in contact position identity, from largest to smallest.

The second panel was designed using the "report" tool in the "Explore" tab, which lets you create a Smarty template to design and publish your own research reports directly from the Heurist interface (Fig. 13). “Smarty is a template engine for PHP, facilitating the separation of presentation (HTML/CSS) from application logic. It allows you to write templates, using variables, modifiers, functions and comments”⁶.

The tool is divided into three sections. On the left you'll find the various database records. We've chosen the [Intertextuality] form, since the data we want to visualize can be found there. Then simply select the condition, loop or insertion shortcuts to enter the smarty template code in the second pane on the right. The encoding is a mixture of HTML and Smarty template, as we want to display the results in HTML on the site. It is possible to write the code in solid text as well as using the quick inserts on the left. On the bottom panel you can see the results of your code to check its validity.

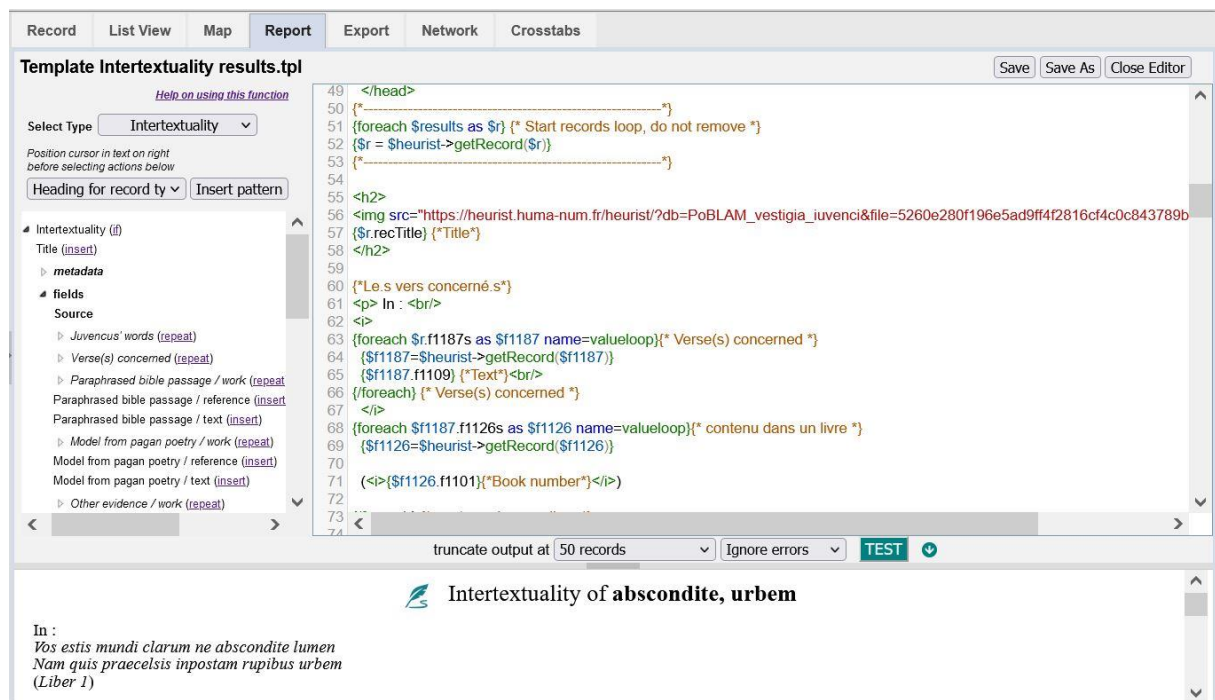



Figure 13 Screenshot from the “Report” tab in Heurist (November 15, 2023)

The result of the smarty report template displays all the information that has been entered for each entity in the [Intertextuality] form (Fig.14).

⁶ See Smarty documentation: <https://smarty-php.github.io/smarty/4.x/>

 Intertextuality of **aurum**

In :
Tus aurum murram regique hominiquē Deoque
(Liber 1)

Juvencus' source

Paraphrased bible passage:
Matheus (New Testament), 2.11 : *Et intrantes domum invenerunt puerum cum Maria matre eius et procidentes adoraverunt eum et apertis thesauris suis obtulerunt ei munera aurum tus et murram*

Follow up text

In
Aurea nascenti fuderunt munera regi
(Sedulius, *Carmen Paschale*, Liber 2):

- ↔ Metrical form : Dactylic hexameter
- ↔ Paraphrased bible passage / work :
Matheus (New Testament), 2.11 : *Et intrantes domum invenerunt puerum cum Maria matre eius et procidentes adoraverunt eum et apertis thesauris suis obtulerunt ei munera aurum tus et murram*

Quote segment

- ↔ Typification : Common motif with 1 matches
- ↔ Word count :
 - Lexeme identity : 0
 - Synonymous variant : 1
- ↔ Biblical motif :
 - **Jesus**
 - Jesus : **the person**
- ↔ Number of
 - common elements in contact position (Identity) : 6
 - common elements in contact position (Synonymous) : 0
 - common elements in unchanged inflected form : 4
 - elements in unchanged order : 0
- ↔ Common position in verse: No
- ↔ Common bible text: Yes

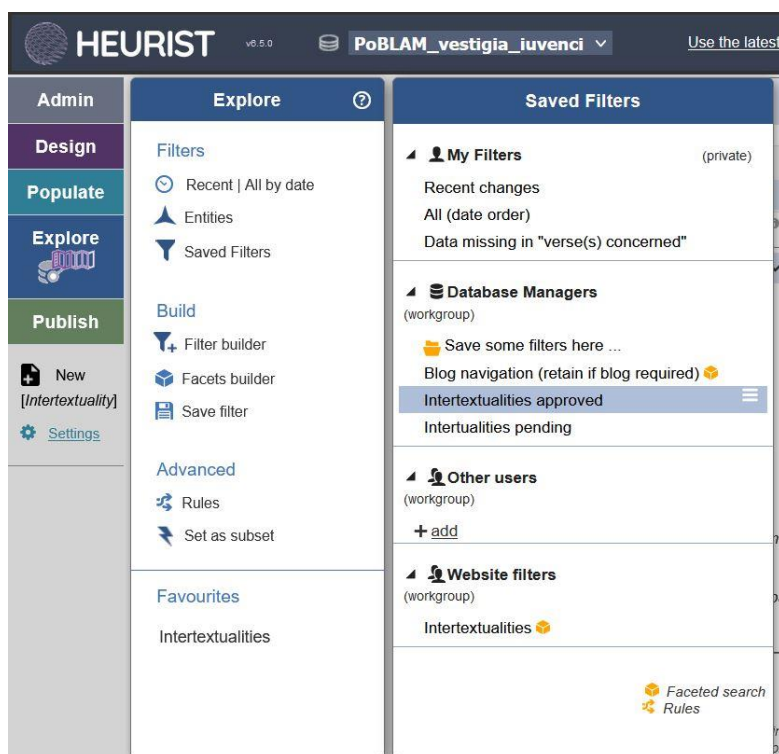
Meta-information

Oldest graspable marked source for the quotation : Panagl 2007
Data file author : PB

Figure 14 Screenshot from the Intertextuality "Report" of the word "aurum" in Heurist (November 15, 2023)

3. Visibility of intertextuality forms

Applying the status does not automatically trigger the publication of entities. It simply serves to organize all the data and filter it in the back office (fig. 15 below). As a result, once they have been examined, you can select all the data with "approved" status and give them "public" visibility (fig. 16 below).



The screenshot shows the Heurist back office interface. The top navigation bar includes the Heurist logo, version v9.5.0, a dropdown menu for 'PoBLAM_vestigia_iuveni', and a 'Use the latest' link. The main interface is divided into three columns: 'Admin', 'Explore', and 'Saved Filters'. The 'Explore' column contains sections for 'Filters' (Recent | All by date, Entities, Saved Filters), 'Build' (Filter builder, Facets builder, Save filter), 'Advanced' (Rules, Set as subset), and 'Favourites' (Intertextualities). The 'Saved Filters' column shows a list of filters under 'My Filters' (private), 'Database Managers' (workgroup), 'Other users' (workgroup), and 'Website filters' (workgroup). A filter named 'Intertextualities approved' is highlighted in blue, with 'Intertextualities pending' listed below it. At the bottom right, there are icons for 'Faceted search' and 'Rules'.

Figure 15 Filter saved in the back office to automatically select all "Intertextuality" entities whose status corresponds to "Approved", 05/12/2023.

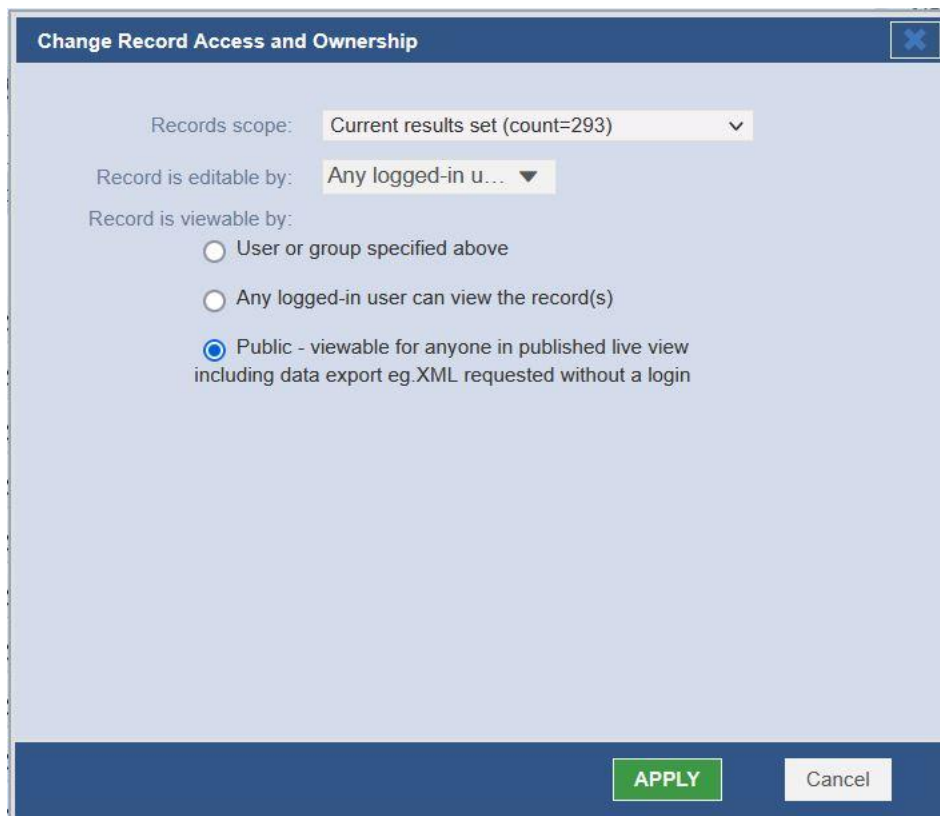


Figure 16 Window for applying visibility to approved entities. Obtained after selecting the corresponding registered filter, then clicking on the "Share"/"Ownership/visibility" button, 05/12/2023.

(Fig. 16) You must select “Current results set” in “Records scope” and “Public” in “Records is viewable by:” and make sure you leave “Any logged” in “Record is editable by” so that visitors cannot modify the data but can simply view it.

In order to examine the entities marked as 'Pending' in preparation for publication, you can choose the corresponding filter, either in the back office (as shown in figure 15 above), or directly on the site from the 'Intertextualities' tab, having first indicated 'Pending' in the 'Status' filter at the very bottom of the facet. You can then consult the results of the form more easily via the report, while being able to modify them instantly by clicking on the pencil icon.

II. Scholarly edition

Using an XSLT transformation sheet, we cross-referenced the export of entities from the 'Intertextualities' form in XML HML and the texts encoded in XML-TEI to produce an HTML file per work that displays the full text, with all the 'intertextuality' information pop-up for each word concerned.

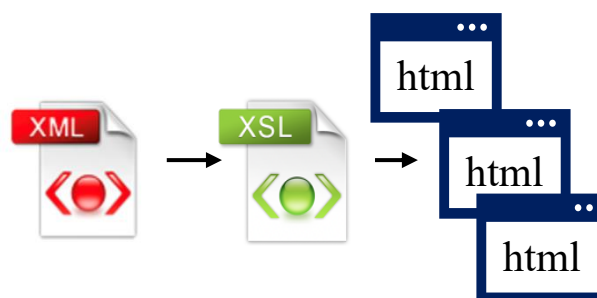


Figure 17 XML to HTML transformation diagram

1. Digital production of scholarly editions

As explained above, to create an HTML file for each work, we extracted the Heurist data from the [Intertextuality] form in XML HML (fig. 18), which we cross-referenced with the XML using a master file (fig. 19) and a single XSLT transformation sheet (fig. 20).



Figure 18 Screenshot on Oxygen of an extract from the Heurist XML HML export file (October 27, 2023)

The first `xi:include` in the master file (fig. 19) refers to the export HML XML file. Whenever it's necessary to update new database entries, it's not enough to download the export to the "XML" folder, but you also need to replace the file name with the new one.



Figure 19 Screenshot on Oxygen of an extract from the XML Master file (October 27, 2023)

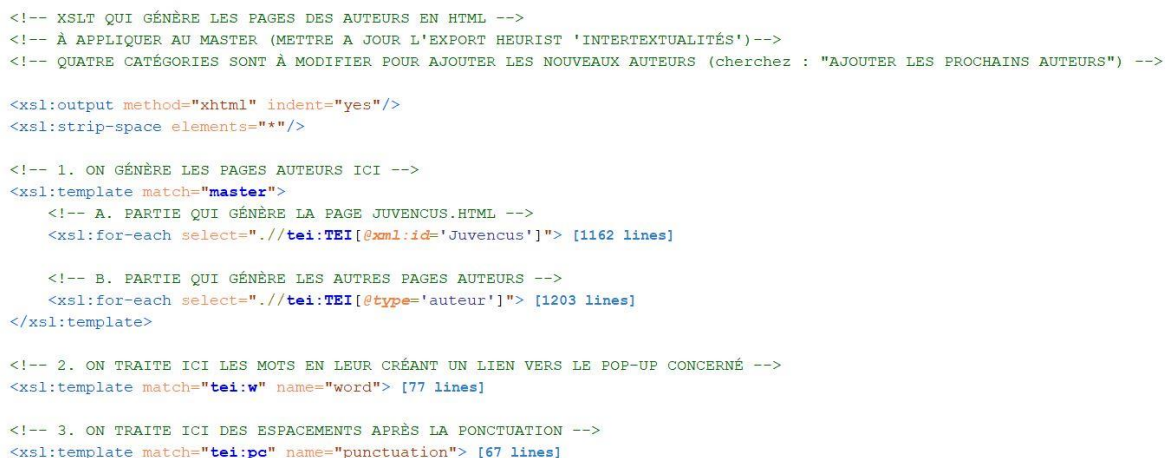


Figure 20 Screenshot on Oxygen of an extract from the transformation sheet (November 13, 2023)

(Fig. 20) The first part of the XSLT generates the text structure and pop-ups. We have to distinguish Juvencus from the rest of the authors, as the structure of the XML HML reflects the organization of the database: a comparison of the Juvencus text with other texts. Information relating to Juvencus is not encoded according to the same criteria as for other authors. We have identified them on the XML files by adding an @type="auteur". The second part allows you to copy all the words, adding pop-up links where available. The third part creates punctuation in the text.

All other pages have been designed directly in HTML.

2. Visualization presentation of the texts

Each work has its own HTML page with a quick navigation system at the top left of the page. An arrow at bottom right automatically returns you to the top of the page (fig. 21).

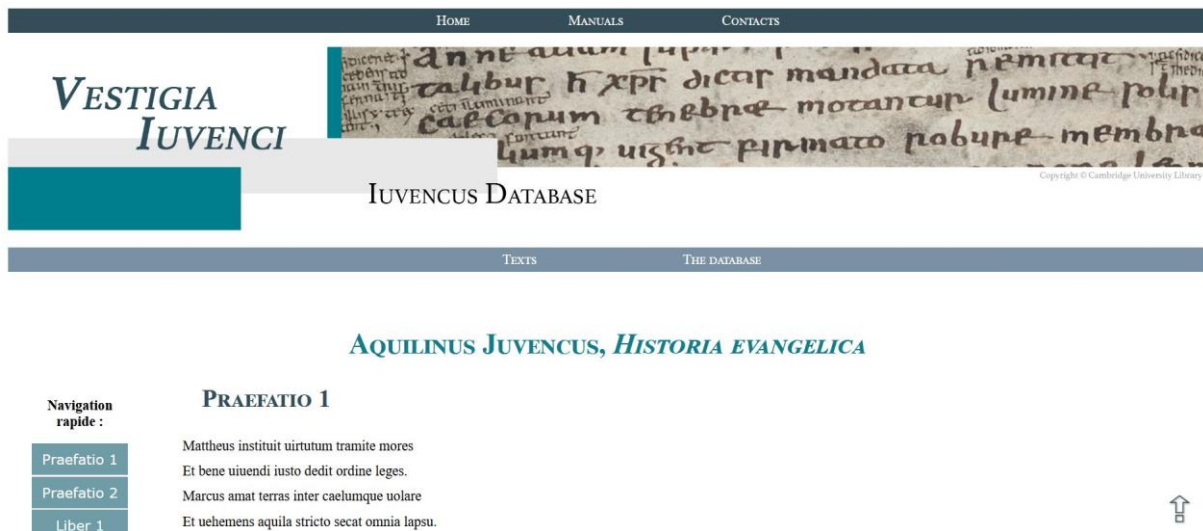


Figure 21 Scholarly edition of Vestigia Iuvenci, Juvencus Historia evangelica page (November 13, 2023)

When reading the text, each intertextual word has a clickable icon. A pop-up window then appears, displaying simple information related to the follow-up text (fig. 22). For more information, simply click on the + button to view the entire file: follow-up text, quote segment and meta information (fig. 23). You can also click on the verse of the follow-up text to find it in context. Similarly, each word linked to an intertextuality towards Juvencus has a pop-up window on the same model as for Juvencus (fig. 24).

Nec metus, ut mundi rapiant incendia secum
 Hoc opus; hoc etenim forsan me subtrahet igni
 Tunc, cum flammiuma discendet nube coruscans
 Iudex, altithroni genitoris gloria, Christus.
 25 Ergo age! Sanctificus adsit mihi carminis auctor
 Spiritus, et puro mentem riget amne canentis
 Dulcis Iordanis, ut Christo digna loquamur.

LIBER 1

Rex fuit Herodes Iudaea in gente cruentus,
 Sub quo seruator iusti templique sacerdos
 Zacharias, uicibus cui templum cura tueri
 Digesto instabat lectorum ex ordine uatum.
 5 Huius inhaerebat thalamis dignissima coniux.
 Cura his ambobus parilis moderaminis aequi,
 Ambos adnexos legis praecepta tenebant.
 Nec fuit his suboles, iam tum uergentibus annis,
 Gratus ut donum iam desperantibus esset.
 10 Sed cum forte aditis arisque inferret odores
 Zacharias, uisus caelo discendere aperto

gloria and Christus Close

Follow up text

Paulinus Nolanus, *Carmina*, *Carmen 6*:
Cum quo nostra salus sanctorum gloria Christe
 Words concerned: 1 gloria 2 Christe

↔ Metrical form: Dactylic hexameter

+



Figure 22 Scholarly edition of *Vestigia Iuveni, Iuuenus Historia evangelica* page / small pop-up of “gloria” v. 24. (November 13, 2023)

Nec metus, ut mundi rapiant incendia secum
 Hoc opus; hoc etenim forsan me subtrahet igni
 Tunc, cum flammiuma discendet nube coruscans
 Iudex, altithroni genitoris gloria, Christus.
 25 Ergo age! Sanctificus adsit mihi carminis auctor
 Spiritus, et puro mentem riget amne canentis
 Dulcis Iordanis, ut Christo digna loquamur.

LIBER 1

Rex fuit Herodes Iudaea in gente cruentus,
 Sub quo seruator iusti templique sacerdos
 Zacharias, uicibus cui templum cura tueri
 Digesto instabat lectorum ex ordine uatum.
 5 Huius inhaerebat thalamis dignissima coniux.
 Cura his ambobus parilis moderaminis aequi,
 Ambos adnexos legis praecepta tenebant.
 Nec fuit his suboles, iam tum uergentibus annis,
 Gratus ut donum iam desperantibus esset.
 10 Sed cum forte aditis arisque inferret odores
 Zacharias, uisus caelo discendere aperto

gloria and Christus Close

Follow up text

Paulinus Nolanus, *Carmina*, *Carmen 6*:
Cum quo nostra salus sanctorum gloria Christe
 Words concerned: 1 gloria 2 Christe

↔ Metrical form: Dactylic hexameter

Quote segment






- ↔ Typification: Common motif with 1 matches
- ↔ Word count:
 - Lexeme identity: 2
 - Synonymous variant: 0
- ↔ Biblical motif
 - Jesus
 - Jesus: **the person**
- ↔ Number of:

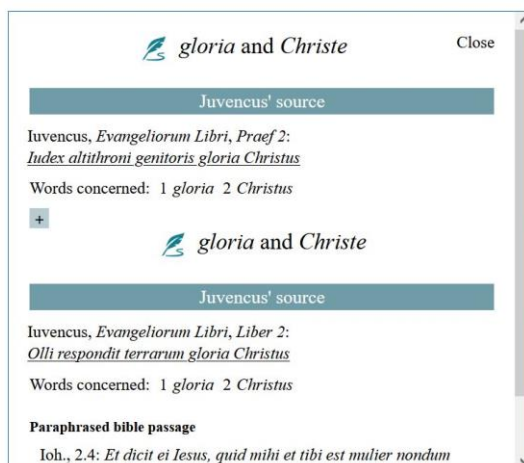


Figure 23 Scholarly edition of *Vestigia Iuveni, Iuuenus Historia evangelica* page / large pop-up of “gloria” v. 24. (November 13, 2023)

Aeterno cum patre manens, in saecula regnans,
Consona quem celebrant modulati carmina Dauid,
85 Et responsuris ferit aera uocibus Amen.

CARMEN 6

Summe pater rerum caelique aeterna potestas,
Cum quo nostra salus, sanctorum gloria, Christe,
Spiritus et patri pariter natoque cohaerens,
Qui mentes linguasque regis uiresque ministras,
5 Promeruit quas sola fides, cui plena potestas
Brutis ingenium uocemque infundere mutis,
Praesta euangelico ductum de fonte Iohannem
In nostra arenti decurrere carmina riuo.
Ille quidem tantus, quantum potuit dare mundo
10 Qui nasci talem noua per miracula iussit;
Sed licitum magnis tenues impendere curas,
Nec dedignantur uilem caelestia laudem.
Pars etiam meriti meritum celebrare piorum;



gloria and Christe Close

Juvencus' source

Iuuenus, *Evangeliorum Libri, Praef 2:*
Iudex altithroni genitoris gloria Christus

Words concerned: 1 gloria 2 Christus

+

gloria and Christe

Juvencus' source

Iuuenus, *Evangeliorum Libri, Liber 2:*
Olli respondit terrarum gloria Christus

Words concerned: 1 gloria 2 Christus

Paraphrased bible passage

Ioh., 2.4: *Et dicit ei Iesus, quid mihi et tibi est mulier nondum*



Figure 24 Scholarly edition of *Vestigia Iuueni, Paulinus Nolanus Carmina* page / large pop-up of "gloria" v. 2. (November 13, 2023)

For the example of the term "gloria" in carmen 6 by Paulinus Nolanus (fig. 24 above), we can see that there are two intertextualities towards Juvencus. Each part can be enlarged and reduced independently. Once again, you can return to Juvencus' text by clicking on the relevant verse(s).

"The data base" tab next to the text selection on the bottom navigation bar automatically redirects to the Heurist database and links the two sites together (fig. 21).

Appendix: Working files⁷

The Vestigia Iuvenci project - consisting of two distinct components - has two working folders.

The first, dedicated to visualizing the database by reading texts, is called “Vestigia_Iuvenci”. The data is organized according to file format or type into seven folders: CSS, images, HTML, XML, XSLT, JS and Font. Files are named according to their content:

- Text files are named after the author (example: Juvencus.xml / Juvencus.html).
- The XML-HML export is saved in the XML folder and has the same name as when it was uploaded to Heurist. In this way, we keep track of the various export stages. However, it is necessary to modify its name in the master.xml file so that the transformation can be applied correctly.
- Other HTML pages are named according to their content (for example, contacts.html).
- XSLT⁸, JS and CSS files are named according to their use. For example, “general.css” applies to all HTML files and popUp.css applies exclusively to html that features pop-ups.

The second folder is titled " Textes_Heurist ". As its name suggests, it contains the files needed to import tokenized texts into Heurist. This folder is subdivided into several subfolders:

- Each author has his own folder: containing XML files corresponding to the various stages (tokenization and numbering), an XSLT file to transform the XML into CSV, as well as the final CSV file.
- A transformation XSLT file: converting the XML into HTML.
- A folder named "HTML": grouping together the authors' HTML-formatted text files, making it easy to find the number associated with each word.

General notes :

- Each XML file contains a <teiHeader> tag with associated metadata.
- XSLT transformation sheets are fully commented to explain step-by-step how to use them, and include headings to structure the whole.

⁷ The documents will be available on a Nakala data warehouse at the end of the ANR-DFG PoBLAM.

⁸ For convenience, the XSLT file begins with a comment in uppercase describing its purpose and indicating the XML file on which to apply it.